

REMARKS

Favorable reconsideration of this application, as amended, and in light of the following discussion is respectfully requested. Claims 13-14, 16-17, 19-20, 23, 26-28, 31, 34-37, 40, 42-43, 54-90, 97-102 and 106-111 are pending. Claims 13, 23, 31, 37, 54, and 106-110 have been amended. No new matter is added by these amendments. Further, none of these amendments constitutes a narrowing amendment. Claims 13, 23, 31, 37, and 54 have been amended to set forth, with specificity, that which was inherently within the claims since, as defined in the specification, the dispenser as claimed and defined is a dynamic dispenser.

Claim 111 has been added. Support for this claim can be found in the original specification at, for example, page 11, paragraph [038], line 7. As no new matter is added with this claim, Applicants respectfully request that it be entered without objection.

Examiner Interview

Applicants would like to thank Examiner Paden for the courtesies she extended to the inventor and his representatives during the interview on February 3, 2005. Applicants accept as an accurate record the Examiner's summary of the interview as set forth in the interview summary record.

Rejection Under 35 U.S.C. §112

Claims 20, 28, 36, 43, 58-63, 67-72, 76-81, 85-90, 97-102, and 106-110 have been rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing new

matter. As discussed with the Examiner at the recent interview, all of the pending claims find support in the specification, as originally filed. Thus, Applicants respectfully traverse this rejection.

First, the term “tagatose” appears in the original specification at page 11, paragraph [038], line 8.

Second, the term “salt” appears in the original specification at paragraphs [006] and [042], which both disclose the addition of one or more salts to modify the FCB of the invention. Also as discussed with the Examiner, Applicants have amended claims 106-110 to remove the reference to “mineral,” as it describes the salts. While the specification clearly discloses that the term “salt” includes mineral salts, e.g., sodium chloride and potassium chloride, the claims have been amended to claim more broadly that aspect of the invention.

Finally, the phrase “acesulfame-K, cyclamate or sucralose,” appears in claims 4 and 8, as originally filed. A copy of the originally filed claims are attached hereto for the Examiner’s convenience. See Exhibit A. While the claims as originally filed constitute appropriate disclosure, out of an abundance of caution, Applicants have incorporated this disclosure into the specification by the present amendment. Thus, no new matter has been added by this amendment.

In view of the above remarks and these claim amendments, Applicants respectfully request withdrawal of this ground of rejection.

Rejections over Broz

The Examiner has rejected claims 13, 14, 16, 17, 23, 26-29 [sic], 31, 34-37, 42, 43, and 54-90 as anticipated under 35 U.S.C. § 102(e) by U.S. Patent Application Publication No. 2002/0197376 to Broz, having a filing date of April 12, 2002, and a provisional filing date of April 12, 2001. Applicants submit herewith a revised Declaration of Grant DuBois under 37 C.F.R. § 1.131 establishing that the invention, as presently claimed, was reduced to practice prior to the earliest effective filing date of Broz. See Exhibit B. This Declaration provides clarification of the points requested by the Examiner during the recent interview.

Since Broz does not claim the same invention as the present application and since it is not a statutory bar under 35 U.S.C. § 102(b), pursuant to 37 C.F.R. § 1.131, it is appropriate to establish prior invention by the filing of an oath or declaration from a qualified party, thereby removing the reference as prior art.

In view of this Declaration, withdrawal of all rejections based upon Broz is earnestly solicited.

Rejections Based upon Stefandl

The Examiner has rejected claims 23, 64-67, 69, 71, 73, and 76 have been rejected under 35 U.S.C. § 103(a) over U.S. Patent Application Publication No. 2002/0136803 to Stefandl in view of U.S. Patent No. 5,380,541 to Beyts.

Stefandl is directed to a product that is rendered frozen in a household freezer and that can be consumed under normal ambient temperature conditions. As discussed during the interview, the beverages of the present invention are quite different as they

are formulated for dispensing from a frozen carbonated beverage fountain. Applicants have amended claims 13, 23, 31, 37, and 54 to clearly state, as defined in the specification, that the dispenser is a dynamic dispenser, not a static unit for use in an home refrigeration system. Support for this amendment can be found at, for example, paragraph [002], which describes the fountain as a mixing chamber having a rotating agitation shaft from which the beverage is dispensed. Further, at paragraph [004], the dispensing conditions are characterized based upon an FCB machine under normal operating conditions. Thus, it is readily apparent from the specification that Applicants disclose a dynamic dispenser from which their frozen beverage may be dispensed.

Since Stefandl does not teach a beverage capable of being dispensed from a dynamic dispenser, withdrawal of all grounds of rejection based upon Stefandl are respectfully requested.

Rejections based on Marulich

Claims 1, 2, 4-6, 9-10, 21, 24, 26-29, 32-36, 44-52, 64-81, 91-102, and 104-105 have been rejected over U.S. Patent No. 3,826,829 to Marulich in combination with Cole and DeCock and in some instances further in view of Beyts or Anderson. Like Stefandl discussed above, Marulich is concerned with the production of a slush-type beverage that can be enjoyed in one's own home; therefore, like Stefandl, Marulich is concerned with the production of slush beverage in a home freezer. As discussed above, the beverages of the present invention are quite different as they are formulated for dispensing from a frozen carbonated beverage fountain (dynamic dispenser). Since Applicants have amended claims 13, 23, 31, 37, and 54 to clearly define the dispenser

as dynamic and not including a static unit for use in a home refrigeration system, the rejections based upon Marulich have been overcome and their withdrawal is earnestly solicited.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and the continued examination of this application and the timely allowance of the pending claims.

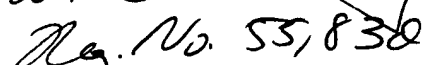
Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.



Dated: February 22, 2005

By:  Reg. No. 55,830

Lori-Ann Johnson
Reg. No. 34,498





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Grant E. DUBOIS et al.

Application No.: 09/838,809

Filed: April 20, 2001

For: NON CALORIC FROZEN
CARBONATED BEVERAGE

)
)
) Group Art Unit: 1761
)
) Examiner: C. Paden
)
)
) Confirmation No. 3526
)

EXHIBIT A

Originally Filed Claims

We claim:

1. A reduced calorie or non-caloric frozen carbonated beverage comprising:
 - (a) a reduced calorie or non-caloric beverage syrup containing a freezing point depressant;
 - (b) water; and
 - (c) carbon dioxide.
2. The beverage according to claim 1, wherein the freezing point depressant comprises a Sugar MNS selected from a group comprising erythritol, isomalt, maltitol, lactitol, fructo-oligosaccharide sweetener or mixtures thereof.
3. The beverage according to claim 1, wherein the freezing point depressant is erythritol.
4. The beverage according to claim 1, wherein the beverage syrup contains a high-potency non-caloric sweetener selected from aspartame, saccharin, acesulfame-K, cyclamate, sucralose, or a combination thereof.
5. A reduced calorie or non-caloric frozen non-carbonated beverage comprising:
 - (a) a beverage syrup containing a high-potency non-caloric sweetener and a freezing point depressant; and
 - (b) water.
6. The beverage according to claim 4, wherein the freezing point depressant is a Sugar MNS selected from a group comprising erythritol, isomalt, maltitol, lactitol, or fructo-oligosaccharide sweetener.
7. The beverage according to claim 6, wherein the Sugar MNS is erythritol.

8. The beverage according to claim 4, wherein the high-potency non-caloric sweetener is selected from a group comprising of aspartame, saccharin, acesulfame-K, cyclamate, sucralose, or a combination thereof.
9. A method of making a reduced calorie frozen carbonated beverage comprising:
combining a reduced calorie or non-caloric beverage syrup containing a freezing point depressant at a reduced temperature with water; and carbon dioxide.
10. The method according to claim 9, wherein the freezing point depressant is a Sugar MNS is selected from a group comprising erythritol, isomalt, maltitol, lactitol, fructo-oligosaccharide sweetener or mixtures thereof.
11. The method according to claim 10, wherein Sugar MNS is erythritol.
12. A method of depressing the freezing point of a reduced calorie beverage syrup comprising:
preparing a reduced calorie beverage syrup by replacing up to one third of a high-potency non-caloric sweetener with a freezing point depressant selected from a Sugar MNS selected from erythritol, isomalt, maltitol, lactitol, fructo-oligosaccharide sweetener or mixtures thereof.

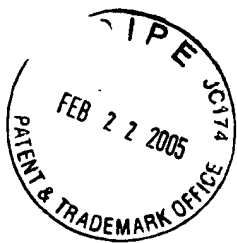


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
)	
Grant E. DUBOIS et al.)	Group Art Unit: 1761
)	
Application No.: 09/838,809)	Examiner: C. Paden
)	
Filed: April 20, 2001)	
)	
For: NON CALORIC FROZEN)	Confirmation No. 3526
CARBONATED BEVERAGE)	

EXHIBIT B

Declaration Under 37 C.F.R. § 1.131 of Grant E. DuBois



PATENT
Customer No. 22,852
Attorney Docket No. 7738.147

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
)
Grant E. DUBOIS et al.) Group Art Unit: 1761
)
Application No.: 09/838,809) Examiner: C. Paden
)
Filed: April 20, 2001)
)
For: NON CALORIC FROZEN)
CARBONATED BEVERAGE)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

DECLARATION UNDER 37 C.F.R. § 1.131

I, Grant DuBois, state that I am a named applicant of the above-identified application and that I am an inventor of the subject matter described and claimed therein. I declare that:

1. I am currently the Director, Sweetener Platform, with The Coca-Cola Company where I have been employed for the last 12 years.
2. All experiments described below were performed at my direction and under my control, and although the dates of these experiments have been redacted, as has other proprietary information, the experiments described below were performed before April 12, 2001, as evidenced by the following:
 - A. Exhibit A: Page 157 of Laboratory Notebook entitled Diet Coke FCB of Sandy Ryan, showing the production of a reduced calorie frozen dispenser beverage.
3. The experiment at page 157 was conducted by combining the ingredients listed into a syrup, diluting the syrup with water, carbonating with carbon dioxide gas,

and allowing the product to freeze in a frozen carbonated beverage (FCB) machine. The ingredients which formed the beverage syrup included, in the order they are listed, potassium benzoate, aspartame, quillaia extract, yucca extract, erythritol, and propylene glycol. The finished beverage was dispensed and the properties of the FCB were tested. The ingredients, amounts and results are noted on the attached page 157, including observations by Sandy Ryan, the researcher, who performed the tests at my direction. The results indicate that a low calorie slushy FCB had been achieved. Sandy Ryan noted several additional observations regarding the product in script on the side of the page. First, she noted that the product exhibited a good flavor level; however she felt that it could be further optimized by an increase in sweetness in subsequent experiments. Finally, while the slush beverage exhibited good formation, she also noted that finer ice crystals might be achieved by increasing the levels of quillaia extract, yucca extract and/or propylene glycol in subsequent experiments.

4. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that the statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issuing thereon.

Dated: February 18, 2005

By: 
Grant DuBois

TITLE

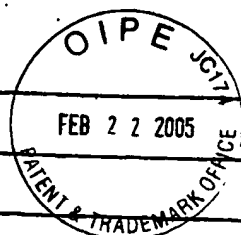
PROJECT NO.

Diet Coke
HB

BOOK NO.

157

Work continued from Page 156

Name: Low Calorie FCB
Comments: Increased FlavorSET (BV, BW, SV, SW) =>
Syrup Volume =>

1.00 Liters

Unit volume: 1950.00 Liters
Carbonation: 0.0 Volumes
Ratio (Throw) 4.0000based on column 1
Type: Diet
Set Sucrose to Zero? Yes

Checks	Weight Per Unit (kg)	Weight Needed (g)
Ingredients		
Part 1B		
S-6121	0.4068	1.051
Part 1		
Part 2	5.6060	14.374
	5.6060	14.374
Part 3		
S-604	0.3706	1.996
S-4781	0.0735	2.498
S-4773	0.0735	2.498
Erythritol	68.2500	174.989
S-802	0.0780	2.500

	SUCROSE	HFSS - 55	HFSS - 42
SYRUP			
Brix	1.50	1.50	1.50
Density	1.00338 kg/L	1.00341 kg/L	1.00341 kg/L
Weight	1.0034	1.0034 kg	1.0033 kg
Volume	1.0000 L	1.0000 L	0.9999 L
Acidity	0.1630 % w/w	0.1630 % w/w	0.1630 % w/w
BEVERAGE			
Brix	0.32	0.32	0.32
Density	0.99942 kg/L	0.99942 kg/L	0.99942 kg/L
Weight	4.992 kg	4.992 kg	4.992 kg
Volume	5.000 L	5.000 L	5.000 L
Acidity	0.0339 % w/v	0.0339 % w/v	0.0339 % w/v

good flavor level -> flush
need to inc sweetness

ice crystals too big
inc: 4761, 4773, 802

WEIGHTS based on diet:

Sweetener (diet)	0.00 g	0.00 g	0.00 g
Syrup Water	788.10	788.10	788.02
Beverage Water	3988.70	3988.70	3988.28
Total Water	4777.79	4777.79	4777.31

WEIGHTS based on % solids of suc:

Sweetener (as is)	77.00%	71.00%
Syrup Water	0.00 g	0.00 g
Beverage Water	3988.70	3988.28
Total Water	4777.79	4777.31

63.673 214.287

Lab Diet FCB

CONFIDENTIAL

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